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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,430	10/07/2003	Tadashi Noguchi	041465-5202	3461

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DRINKER BIDDLE & REATH (DC)
1500 K STREET, N.W.
SUITE 1100
WASHINGTON, DC 20005-1209

EXAMINER	
ADEGEYE, OLUWASEUN	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/679,430	NOGUCHI ET AL.	
	Examiner	Art Unit	
	Oluwaseun A. Adegeye	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 10/07/2003.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1 - 22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) 1 - 22 is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on 10/07/2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☒ All b)☐ Some * c)☐ None of:
1.☒ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 2 and 4 – 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Kikuchi et al (US 2002/0054754 A1).

As to claim 1, Kikuchi discloses a recording apparatus comprising:

a recording device (50) for recording recording data on a recording medium (1001) (see [63] and [73] – [75]) ;

a changing device (300) for receiving a plurality of recording media supplied from an outside, selecting one of the plurality of recording media as received and replacing a first recording medium loaded in the recording device with a second recording medium as selected (see [138] – [141]);

a storage device (2001) for storing, during replacement of the first recording medium, the recording data recorded thereon (see [132]); and

a control device (30) for controlling the recording device and the changing device (see [63], [89] and [140]), monitoring a remaining recording capacity or recording time of the first recording medium during recording (see [90]), causing the first recording medium to be replaced based on monitoring results (see [141], and reading, after completion of the replacement of the first recording medium, the recording data of the first recording medium from the storage device and recording same on the second recording medium (see [86] and [132]).

As to claim 10, Kikuchi discloses a recording apparatus, which records one or more pieces of recording data on one recording medium selected among from a plurality of recording media supplied from an outside (see [63], [73] – [75], [141]), and enables, when the recording medium has no available recording space , an update recording to be performed to conduct overwriting with new recording data in a recording area in which the recording data have currently been recorded, said recording apparatus comprising (see [88] and [143])):

a recording device (50) for recording the recording data on a recording medium (1001) (see [63] and [73] – [75]);

a changing device (300) for receiving a plurality of recording media supplied from an outside, selecting one of the plurality of recording media as received and replacing a first recording medium loaded in the recording device with a second recording medium as selected (see [138] – [141]);

an input device (47) for outputting a signal in accordance with a user's operation (see [110] and [123]); and

a control device (30) for generating, based on the signal output from the input device (see [123]), update recording information for specifying a recording medium, which allows update recording, in the plurality of recording media as received, determining, based on the update recording information, whether the recording medium being currently recorded is allowed to be subjected to the update recording, and controlling, when allowed, the recording device to perform the update recording on the recording medium (see [90],[124],[129], [131] and [140]).

As to claim 13, this claim is similar to claim 10 only in that the limitation "a control device for generating, based on the signal output from the input device, set-specification information for specifying recording media which constitute a set of recording media in the plurality of received recording media, generating update recording information for specifying a recording medium which allows update recording, in the plurality of recording media as received, controlling the recording device and the changing device based on the set-specification information to record a part of the recording data on one of the set of recording media, and then continuously recording another part of the recording data, which follows said part of the recording data, on another recording medium of the set of recording media, controlling, when all of the set of recording media have no available recording space, the recording device and the changing device based on the update recording information to specify a recording medium, which allows update recording, in said set of recording media, and conducting overwriting with new recording data in a recording area of said recording medium as specified, in which the recording data have currently been recorded" is additionally recited.

Kikuchi discloses a control device (30) for generating, based on the signal output from the input device (see [123]), set-specification information for specifying recording media which constitute a set of recording media in the plurality of received recording media, generating update recording information for specifying a recording medium which allows update recording, in the plurality of recording media as received, controlling the recording device and the changing device based on the set-specification information to record a part of the recording data on one of the set of recording media (see [90],[124],[129], [131] and [140]) , and then continuously recording another part of the recording data, which follows said part of the recording data, on another recording medium of the set of recording media (see [132]), controlling, when all of the set of recording media have no available recording space, the recording device and the changing device based on the update recording information to specify a recording medium, which allows update recording, in said set of recording media (see [120] – [121] and [141] – [142]) , and conducting overwriting with new recording data in a recording area of said recording medium as specified, in which the recording data have currently been recorded (see [88] and [143]).

As to claim 14, this claim is similar to claim 1 only in that the limitation "a control device for generating, based on the signal output from the input device, category information that indicates a category of the recording data to be recorded on each of the recording media as received and controlling the recording device to record the category information on the recording media" is additionally recited.

Kikuchi discloses a control device (30) for generating, based on the signal output from the input device (see [123]), category information that indicates a category of the recording data to be recorded on each of the recording media as received and controlling the recording device to record the category information on the recording media (see [73], [88], [90], [129] and [131]).

As to claim 17, Kikuchi discloses a reproducing apparatus that enables sequential reproduction of image data from a plurality of recording media in which a sequence of divided image data (see [93] – [95]) and management information which specifies an order of reproduction have been recorded, comprising (see [73], [88], [90], [129] and [131]).

a reproducing device (60) for reproducing the image data and the management information from a recording medium of the plurality of recording media (see [73], [88], [90], [93] – [95], [129] and [131] ;

a changing device (300) for receiving the plurality of recording media supplied from an outside, selecting one of the plurality of recording media as received and replacing a first recording medium loaded in the recording device with a second recording medium as selected (see [138] – [141]);

an input device (47) for outputting a signal in accordance with a user's operation (see [110] and [123]);

and a control device (30) for controlling, when there is made a detection of specification of the sequential reproduction, the changing device and the reproducing device based on the signal output from the input device (see [123]), to reproduce sequentially the recording media in the reproduction order, which is specified by the management information reproduced from the plurality of recording media as received (see [73], [88], [90], [129] and [131]).

As to claim 20, Kikuchi discloses a method for controlling a recording apparatus, said recording apparatus that has an input device (47) for outputting a signal in accordance with a user's operation (see [110] and [123]) and enables recording data to be dividedly recorded on recording media on which a set-specification information for specifying a set of recording media to be subjected to a sequential recording has previously been recorded (see [131] – [133]), said method comprising:

a step of reading the set-specification information from a plurality of recording media supplied from an outside (see [129] and [141]);

a step of displaying an image for prompting specification of the set of recording media to be subjected to the sequential recording, based on the set-specification information as read (see [142] – [143]); and

a step of recording, after the set of recording media to be subjected to the sequential recording is specified by the input device, recording a part of the recording data on one of the set of recording media, and then continuously recording another part of the recording data, which follows said part of the recording data, on another recording medium of the set of recording media (see [131] – [133]).

As to claim 21, Kikuchi discloses a method for controlling a recording apparatus, said recording apparatus that has an input device (47) for outputting a signal in accordance with a user's operation and enables to record recording data on a recording medium (see [110] and [123]) in which there has previously been recorded an update recording information (see [73], [88], [90], [129] and [131]), which allows, when there is no available recording space (see [63], [73] – [75], [141]), an update recording to be performed to conduct overwriting with new, recording data in a recording area in which the recording data have currently been recorded (see [88] and [143]), said method comprising:

a step of reading the update recording information from a plurality of recording media supplied from an outside (see [129] and [141]);

a step of displaying an image that indicates recording media of the plurality of recording media as received, which allow the update recording to be performed and prompts specification of a recording medium to be subjected to recording, based on the update recording information as read(see [142] – [143]); and

a step of overwriting, after the recording medium to be subjected to the recording is specified by the input device, a recording area in which the recording data has first been recorded, with new recording data when the recording medium has no available recording space, in case where the recording medium as specified allows update recording (see [88] and [141] – [143]).

As to claim 22, Kikuchi discloses a method of controlling a recording apparatus, said recording apparatus that has an input device (47) for outputting a signal in accordance with a user's operation (see [110] and [123]) and enables recording data to be selectively recorded on a recording medium on which a category information, which indicates a category of a recorded content, has previously recorded see [73], [88], [90], [129] and [131]), said method comprising:

a step of reading the category information from a plurality of recording medium supplied from an outside (see [129] and [141]);

a step of displaying the category of the recorded content based on the category information as read and prompting specification of a category of recording data to be recorded(see [142] – [143]);

and a step of selecting, after the category is specified by the input device, a recording medium with the same category as the specified one and recording the recording data on the recording medium (see [131] – [133]).

As to claim 2, Kikuchi discloses the recording apparatus according to claim 1, wherein; said recording data includes image data representing a moving picture (see [64] – [66]), and

said control device has a detecting device for detecting a correlation between frames in the moving picture, said correlation being lower than a reference value, said control device controlling the changing device to replace the first recording medium when the detecting device detects the correlation, which is lower than the reference value, in case where the remaining recording capacity or recording time of the first recording medium is lower than a reference capacity or reference time (see [90] – [91] and [141] – [143]).

As to claim 4, Kikuchi discloses the recording apparatus according to claim 1, wherein; the control device reads, for a predetermined period of time from the completion of the replacement of the first recording medium, the recording data from the storage device at a data read rate higher than a data write rate at which the recording data is written to the storage device, and then records the read data onto the second recording medium (see [82] – [85], [124] and [127] - [128]).

As to claim 5, Kikuchi discloses the recording apparatus according to claim 1, wherein: said storage device has a storage capacity, which is larger than a product of (i) a period of time from a start of the replacement of the first recording medium to a time when recording the data onto the second recording medium becomes possible (see [86] and [132]) and (ii) a data write rate at which the recording data is written to the storage device (see [131] – [132]).

As to claim 6, grounds for rejecting claim 13 apply to claim 6 in its entirety.

As to claim 7, grounds for rejecting claim 13 apply to claim 7 in its entirety.

As to claim 8, Kikuchi discloses the recording apparatus according to claim 6, wherein: said control device controls the recording device and the changing device to record the set-specification information on the recording media of the set of recording media (see [131]).

As to claim 9, Kikuchi discloses the recording apparatus according to claim 6, further comprising:

a reading device (60) for reading the set-specification information from the plurality of recording media as received (see [93], [131] and [140])); and

a device for generating output image data that provides a view for displaying a state of sets of the recording media as received, based on the set-specification information as read, and prompting the user to specify a new set of recording media (see [141] – [143]).

As to claim 11, grounds for rejecting claim 8 apply to claim 11 in its entirety.

As to claim 12, grounds for rejecting claim 9 apply to claim 12 in its entirety.

As to claim 15, grounds for rejecting claim 9 apply to claim 15 in its entirety.

As to claim 16, Kikuchi discloses the recording apparatus according to claim 15, wherein:

the control device identifies the category as selected, based on the signal output from the input device, and controls the recording device and the changing device to record the recording data on the recording medium with a same category as the category as selected (see [14] – [145]).

As to claim 18, Kikuchi discloses the reproducing apparatus according to claim 17, further comprising:

a storage device (72) for storing the image data output from the reproducing device and outputting the image data as stored, on a FIFO basis (see [94]).

the control device writting, for a predetermined period of time before completion of replacement of the first recording medium, data on the storage device at a data write rate higher than a data read rate (see [82] – [85], [124] and [127] - [128]).

As to claim 19, Kikuchi discloses the reproducing apparatus according to claim 18, wherein;

the storage device has a storage capacity, which is larger than the product of (i) a period of time from a start of the replacement of the first recording medium to a time when the reproduction of the data from the second recording medium becomes possible(see [86] and [132]) and (ii) a data read rate of the storage device (see [131] – [132]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Takahashi (EP 0629086 A2).

As to claim 3, Kikuchi discloses the recording apparatus according to claim 1 but does not disclose wherein: said recording data includes intra-frame data resulting from coding of the moving picture in a frame and inter-frame data resulting from coding of the moving picture between frames, and said control device controls the changing device to start replacement of the first recording medium, after completion of recording of the inter-frame data immediately preceding the intra-frame data on the recording medium, and controls the recording device to start recording of data beginning with the intra-frame data onto the second recording medium.

Takahashi discloses said recording data includes intra-frame data resulting from coding of the moving picture in a frame and inter-frame data resulting from coding of the moving picture between frames (see column 4, line 44 – column 5, line 6), and

said control device controls the changing device to start replacement of the first recording medium, after completion of recording of the inter-frame data immediately preceding the intra-frame data on the recording medium, and controls the recording device to start recording of data beginning with the intra-frame data onto the second recording medium (see column 3, lines 14 – 25 and column 5, lines 7 – 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the step of start recording of data beginning with the intra-frame data onto the recording medium as taught by Takahashi to the apparatus of Kikuchi to provide a compressed moving picture apparatus for recording a compressed moving picture signal newly onto a recording medium where compressed moving picture signals are already recorded so as to prevent the reconstructed picture from disordering by picture reconstructing from the recording medium (see column 3, lines 1 – 7).

Conclusion

US 2003/0142955 A1 discloses overwriting data.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oluwaseun A. Adegeye whose telephone number is 571-270-1711. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

09/06/2007

O.A

THAI Q. TRAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600